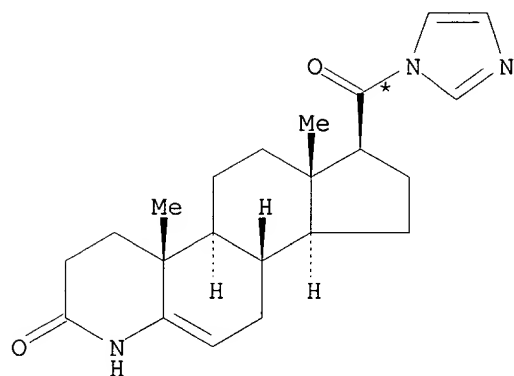


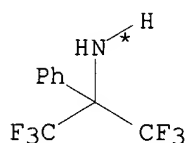
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L21 ANSWER 1 OF 2 CASREACT COPYRIGHT 2000 ACS

RX(1) OF 1 A + B ==> C

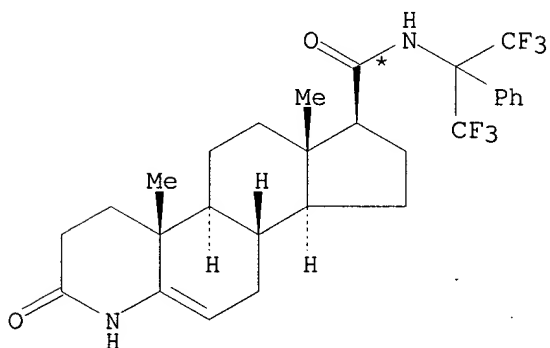


A



B

(1) →



C

YIELD 69%

RX(1) RCT A 229183-12-4, B 15562-06-8

RGT D 75-75-2 MeSO₃H

PRO C 188754-88-3

SOL 67-66-3 CHCl₃

AN 131:73842 CASREACT

TI Process for preparing carboxamido-4-azasteroids

IN Panzeri, Achille; D'Anello, Matteo; Longo, Antonio; Nesi, Marcella

PA Pharmacia & Upjohn Spa, Italy

Searched by John Dantzman

308-4488

SO PCT Int. Appl., 24 pp.

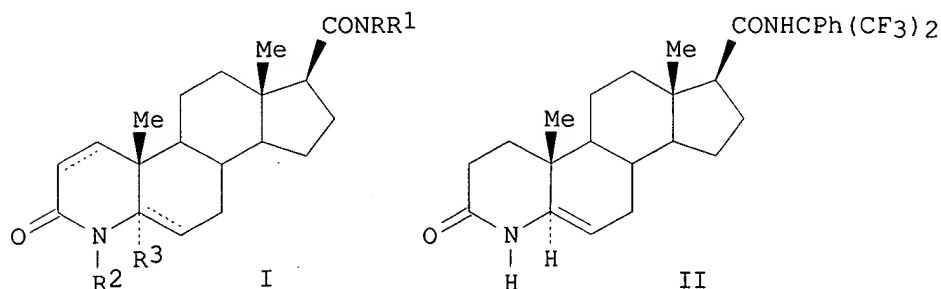
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9935161	A1	19990715	WO 1998-EP8527	19981217
	W:		AL, AU, BA, BG, BR, CA, CN, CZ, EE, HU, ID, IL, JP, KR, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
	RW:		GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
	AU 9925146	A1	19990726	AU 1999-25146	19981217
	EP 970105	A1	20000112	EP 1998-966861	19981217
	R:		AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI		
	NO 9904199	A	19991029	NO 1999-4199	19990830
PRAI	GB 1997-27522		19971231		
	WO 1998-EP8527		19981217		
OS	MARPAT 131:73842				
GI					

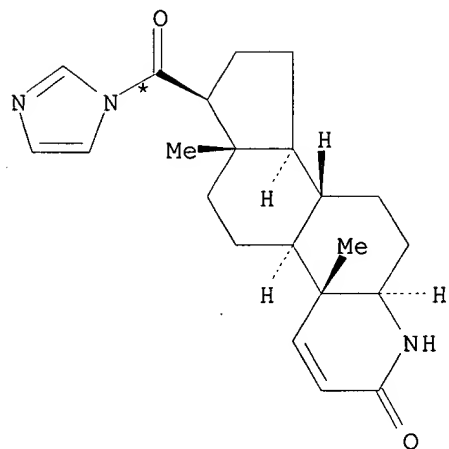


AB A process for producing azasteroids of formula I [R, R₁ = H, (fluorine substituted) alkyl, (fluorine substituted) phenylalkyl, etc.; R₂ = H, (fluorine substituted) alkyl; R₃ = H, absent] comprises treating the corresponding 17.β-carbonylimidazole intermediates with anhyd. acids in the presence of an amine and, optionally, hydrogenating the resulting compd. Thus, 3-oxo-4-azaandrost-5-ene-17.β-carbonyl-1-imidazole was reacted with 1,1,1,3,3,3-hexafluoro-2-phenylprop-2-ylamine and methanesulfonic acid to give II.

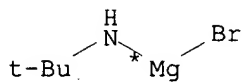
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L21 ANSWER 2 OF 2 CASREACT COPYRIGHT 2000 ACS

RX(1) OF 2 **A** + **B** ==> **C**

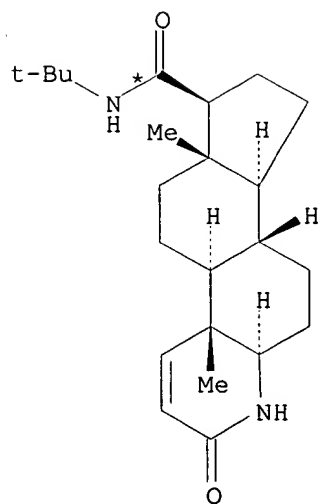


A



B

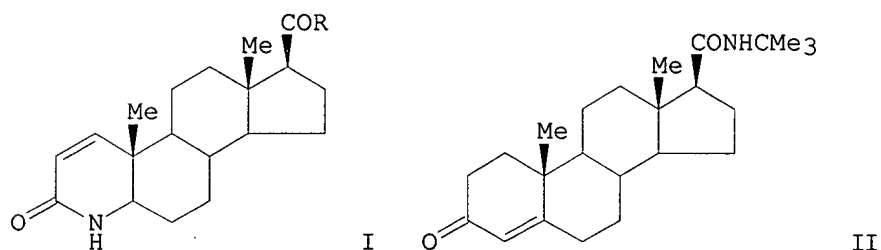
(1) \longrightarrow



C

YIELD 96%

RX(1) RCT A 129273-17-2, B 120814-00-8
 PRO C 98319-26-7
 SOL 109-99-9 THF
 AN 114:164608 CASREACT
 TI Acylimidazolides as versatile synthetic intermediates for the preparation of sterically congested amides and ketones: a practical synthesis of Proscar
 AU Bhattacharya, A.; Williams, J. M.; Amato, J. S.; Dolling, U. H.; Grabowski, E. J. J.
 CS Process Res. Dep., Merck Sharp and Dohme Res. Lab., Rahway, NJ, 07065, USA
 SO Synth. Commun. (1990), 20(17), 2683-90
 CODEN: SYNCAV; ISSN: 0039-7911
 DT Journal
 LA English
 GI



AB Acylimidazolides, e.g., I (R = 1-imidazolyl) react with magnesium amides to produce carboxamides in excellent yields, whereas Fe(III) catalyzed cross coupling between acylimidazolide and Grignard reagents produce ketones in high yields. These methods were utilized to prep. the .alpha.-reductase inhibitor Proscar I (R = NHCMe₃), as well as various 17.beta.-amides, e.g., I (R = NEt₂, NHR₁; R₁ = cyclohexyl, 2-adamantyl) and II, and ketone analogs I (R = sec-Bu, iso-Bu, iso-Pr, cyclohexyl) of .DELTA.1-4-aza-5.alpha.-androst-3-one.